

Master in Offshore Engineering - June 7th Seminar *Earthquake Engineering for Offshore Structures*

Geowynd's Daniele Bertalot will be talking to the students of the Master in Offshore Engineering about Earthquake Engineering for offshore structures. The talk will be target to a non-specialist audience and will provide an overview of seismic design approaches typically adopted for major offshore developments. Focus of the discussion will be on the following aspects:

- ✓ Definition of design seismic input (regional seismicity)
- ✓ Assessment of local site effects
- ✓ Soil-structure interaction
- ✓ Modelling approaches
- ✓ Soil liquefaction and its potential consequences



Dr Daniele Bertalot
PhD, MSc, BSc
Principal Engineer

Speaker Biography

Dr. Daniele Bertalot is a principal geotechnical engineer at Geowynd and a trusted industry consultant with over 13 years' experience in onshore and offshore geotechnical engineering.

Daniele holds a PhD in Soil Dynamics from the University of Dundee, where he investigated the behavior of shallow founded structures resting on liquefiable soil. His research was based on advanced experimental techniques such as dynamic centrifuge modeling. As part of this study, he visited Chile following the 2010 Maule earthquake, to collect field data on structures damaged by subsoil liquefaction. For his research Daniele was awarded the University of Dundee 2014 Dr. Angus Fulton Prize for the best research thesis within the School of Physics, Engineering and Mathematics.

Daniele also holds a Bachelor and Master's degree in Land Protection Engineering from Politecnico di Torino. As part of his Master's program, he spent a six months period as a visiting student at the University of Strathclyde, studying unsaturated soil mechanics applied to flood-embankment instability.

Prior to joining Geowynd, Daniele worked for RINA Consulting (formerly D'Appolonia S.p.A.) as Geotechnics Unit Manager, where he coordinated a group of ten geotechnical engineers, providing a wide variety of services spanning from SI interpretive reporting, offshore foundation and anchor design, geohazard engineering and high-level consulting on geotechnical earthquake engineering problems.

Over the years Daniele has been involved in the mitigation of earthquake hazard (direct and indirect) for several oil and gas and offshore renewable energy projects in the most seismically active areas of the planet.